International application No. PCT/CA2004/002156

A. CLASSIFICATION OF SUBJECT MATTER IPC(7): C12N-15/53, C12N-9/02, C12N-5/10, C12N-15/82, C12P-7/64, A01H-5/00, C07K-14/195, C12N-15/31

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(7): C12N, C12P-7/64, A01H-5/00, C07K-14/195

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

DELPHION, WEST, ESPACENET, AGRICOLA, CAPLUS, BIOSIS, REGISTRY; Keywords: (delta-9 or stearoyl-ACP) desaturase, endoplasmic reticulum (retention), transgenic, prokaryotic

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).		
Y	US 5663068 A (RHONE POULENC AGROCHIMIE (FR)) 2 September 1997 - example 6; cited in the description	1-33		
Υ .	US 6043411 A (KIRIN BEER KABUSHIKI KAISHA (JP)) 28 March 2000 - the entire document, cited in the description	1-33		
, Y .	US 20030054521 AI (BOOTH et al (US)) 20 March 2003 - entire document, particularly paragraph [0069]	1-33		
A	VINCENT, M.J. et al., Function of the KKXX motif in endoplasmic reticulum retrieval of a transmembrane protein depends on the length and structure of the cytoplasmic domain. J Biol Chem, 9 January, 1998, Vol. 273, No. 2, pages 950-956, ISSN: 0021-9258.	1-33		

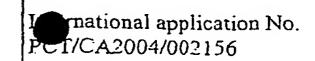
[ ] Further documents are listed in the	continuation of Box C.	[X]	See patent family annex.		
* Special categories of cited document  "A" document defining the general state to be of particular relevance  "E" earlier application or patent but publifiling date  "L" document which may throw doubts cited to establish the publication date	of the art which is not considered , lished on or after the international	"T" "X"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination		
"O" document referring to an oral disclosure of the priority date claimed	sure. use, exhibition or other means	"&"	document member of the same patent family		
Date of the actual completion of the international search  21 March 2005 (21-03-2005)			Date of mailing of the international search report  04 May 2005 (04-05-2005)		
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001(819)953-2476		Autho	Authorized officer  Michael W. De Vouge (819) 997-2952		

Form PCT/ISA/210 (second sheet ) (January 2004)

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150	XI	No. 1 Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)
1.		ith regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the aimed invention, the international search was carried out on the basis of:
	a.	type of material
		[X] a sequence listing
		[ ] table(s) related to the sequence listing
	ს.	format of material
		[X] in written format
		[X] in computer readable form
	v.	une of imagramishing
		[X] contained in the international application as filed.
		[X] filed together with the international application in computer readable form.
		[ ] furnished subsequently to this Authority for the purposes of search.
2.	[	] In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been
		filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3.	Ad	Iditional comments :
٠		
		·



Box No. II	Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)
This internationa reasons:	l search report has not been established in respect of certain claims under Article 17(2)(a) for the following
1. [ ] Claim N	
	they relate to subject matter not required to be searched by this Authority, namely:
2. [X] Claim N	os.: 1-5, 7, 8 (partial)
	they relate to parts of the international application that do not comply with the prescribed requirements to such an extent neaningful international search can be carried out, specifically:
recitation	of these claims have been restricted to SEQ ID NO:2, modified by addition of any of the retention signals recited in claims 7 and 8, as the of functional attributes alone for polypeptides and polynucleotides so claimed render it impossible to undertake a meaningful search over rescope.
3. [ ] Claim No	os. :
because 1	hey are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Sec	arching Authority found multiple inventions in this international application, as follows:
, ~	
1. [ ] As all red	quired additional search fees were timely paid by the applicant, this international search report covers all
searchab	e claims.
2. [ ] As all sea	archable claims could be scarched without effort justifying an additional fee, this Authority did not invite
payment	of any additional fee.
3. [ ] As only s	some of the required additional search fees were timely paid by the applicant, this international search report
COACI2 OF	aly those claims for which fees were paid, specifically claim Nos.:
4 ( ] No requi	red additional search fees were timely paid by the applicant. Consequently, this international search report is
restricted	to the invention first mentioned in the claims; it is covered by claim Nos.:
Ren	nark on Protest [ ] The additional search fees were accompanied by the applicant's protest.
	[ ] No protest accompanied the payment of additional search fees.

Information on patent family members

PCT/CA2004/002156

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